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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/443,401	11/19/1999	SAID ZAMANI-KORD	10991745-1	7179 19
22879	7590	10/30/2003	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			DICUS, TAMRA	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 10/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/443,401

Applicant(s)

ZAMANI-KORD ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 15-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-14 and 32-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

The 112 rejections are withdrawn due to Applicant's amendment. The objection is withdrawn. The specification objection is withdrawn. Cancellation of claims 3, 5, and 34 are acknowledged. The Request for Continuing Examination is acknowledged.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,089,614 to Howland et al.
3. Howland teaches a security device with first (7) and second (8) indicia with a metallized substrate in the middle (1). The indicia are printed with conventional inks such as fluorescing inks. See col. 8, lines 12-20. At col. 3, lines 7-20, Howland teaches the indicia may be machine readable on each side of the substrate. The substrate can be coated with a very thin film of aluminium (equivalent to thin metal foil layer of claim 2), metal oxide or other reflective layer at col. 3, lines 23-33. That the structure has a means for preventing interference is inherent as the same layered structure and materials are provided by Howland.

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4, 6, 8, 10-11, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,417,247 to Hardwick et al. in view of USPN 6,089,614 to Howland et al.

Hardwick teaches banknotes incorporating security devices that comprise a planar substrate (10) (claim 32) having a first and second indicia surrounding the first and second surfaces of substrate (10), see Figure 6. The inks to print the indicia may be of titania or fluorescent type, see col. 4, lines 30-35. Hardwick teaches two individual ink layers above and below the substrate (first and second thin layers of a substrate material of claim 8). Hardwick is silent to teaching a foil or reflective layer between the two indicia. However Howland teaches a security device with first (7) and second (8) indicia with a metallized substrate in the middle (1). The substrate can be coated with a very thin film of aluminium (equivalent to thin metal foil layer of claim 2), metal oxide or other reflective layer at col. 3, lines 23-33. Hence it would have been obvious to one of ordinary skill in the art to modify the banknote of Hardwick to include a metallized, foil, or reflective layer as the substrate since Howland teaches metallizing a substrate to exhibit such properties as high reflectivity and also enable the second indicia to be viewed in transmitted light at col. 3, lines 29-33.

The property of the fluorescent material of claim 10 is inherent as the same materials are used as Hardwick.

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Regarding claim 11, since the same position of the indicia is taught, the indicia is in overlapping relation.

6. Claims 7, 9, 12-28, and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,417,247 to Hardwick et al. in view of USPN 6,089,614 to Howland et al. and further in view of USPN 5,492,370 to Chatwin et al.

Hardwick in view of Howland is relied upon above. Hardwick is silent to stating the specific polymer used in the plastic substrate (claim 9). However, Chatwin teaches a decorative article that comprises a plastic metallized substrate of polyester at col. 6, lines 20-25. Hence it would have been obvious to one of ordinary skill in the art to modify the banknote of Hardwick to include polyester since it is well known functional equivalent polymeric film as Chatwin teaches at col. 6, lines 20-30.

Hardwick is silent to teaching the specific metal oxide used in the reflective layer. However, Chatwin teaches well known metal oxides such as titania (radiation blocking-claim 7) at col. 8, lines 5-9. Hence it would have been obvious to one of ordinary skill in the art to modify the banknote of Hardwick to include a metal oxide such as titania since it is a suitable functional equivalent as taught by Chatwin at col. 8, lines 1-9.

Hardwick does not teach further comprising a print medium, tape having first and second surface (tape layer), or roll of claims 12-28, and 35-37. However, Chatwin teaches several print medias such as a glass or tax certificate adhered to the substrate via a self adhesive film/layer (tape) at col. 11, lines 50-65 and col. 12, lines 1-25. Hence it would have been obvious to one of ordinary skill in the art to modify the banknote of Hardwick to further include a print medium and tape layer for the purpose of producing

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vehicle tax certificates as taught by Chatwin at col. 11, lines 50-65 and col. 12, lines 1-25.

Chatwin teaches at col. 6, line 39, the substrate may be in roll form (claims 14 and 31). Hence it would have been obvious to one of ordinary skill in the art to modify the banknote of Hardwick to include a substrate in roll form since Chatwin teaches a substrate can be in roll form to be cut and sized at col. 6, lines 40-43.

While Hardwick does not define the structure of claims 12-28 and 35-37, Chatwin teaches indicia may be coated on one or both sides of the polymeric substrate at col. 5, lines 45-58. Tape is a polymeric substrate and hence it is obvious to include a reflective material disposed on either side since the references teach metallizing, or providing metal oxide or reflective coatings to a plastic film is known to provide optical variable effects as taught by Chatwin at col. 5, lines 34-40, col. 6, lines 28-33.

Response to Arguments

Applicant's arguments filed 8-28-03 have been fully considered but they are not persuasive.

1. Applicant argues that Howland does not provide a means for interference. The Applicant has not persuasively argued. Howland teaches a security device with first (7) and second (8) indicia with a metallized substrate in the middle (1). The indicia are printed with conventional inks such as fluorescing inks. See col. 8, lines 12-20. That the structure has a means for preventing interference is inherent as the same layered structure and materials are provided by Howland. As to the argument of how path 10 allows viewing under certain conditions is of no relevance because Howland provides the same structure as recited in instant claim 1. Any other property that evolves because of this

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layered structure is naturally provided. In response to applicant's argument that viewing indicia under transmission, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., light transmission) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). No where does Applicant claim any light transmission property. Applicant further alleges that Howland's structure provides "interference" between the first and second indicia. However, the same structure is provided, first indicia/metal/second indicia. The first and second indicia can't interfere because the metal is in between them. Applicant has not fully disclosed what kind of "interference" he is claiming, i.e. ink interference, light interference, energy interference, etc. Further there is no proof as to the assertion, "light or energy transmission *may well* lead to interference". Because there is no objective evidence provided by the Applicant, the Examiner contends that since the same structure is provided, then the same elements are used to provide the same functionality as preventing interference. Further, what happens to them under certain external conditions is inherently provided because the same materials are used. Moreover, as written, the claim states a reflective layer between first and second indicia **prevents passage** of the first and second indicia signal during a detection process. "Preventing passage" is taken to mean the "means for preventing

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interference". Applicant has not claimed a certain type of ink composition that may be different from what Howland provides and until such limitation is introduced, the rejection will stand as is. Howland provides first and second fluorescent inks and a reflective layer between them, which a metal layer is equivalent to. The Examiner sees no differences.

Applicant further argues that there is no advantage of adding a thin metal of Howland to Hardwick. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Howland and Hardwick teach indicia and modification of indicia for security devices. The advantage, as previously stated, lies within the metallized substrate in the middle serving to produce high reflectivity and enable a second indicia to be viewed in transmitted light as taught by Howland at col. 3, lines 29-33. Applicant further argues that such teaching would not provide a means for preventing interference. The metal disposed between the ink layers serve to provide this function. Applicant has not provided any objective evidence to state any different. The indicia of each layer does not interfere because the metal layer lies between the two ink layers, which the Examiner takes to be equivalent to a means for preventing interference.

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Applicant alleges that Chatwin does not teach security indicia and threads being readable during a detection process, or a means for providing interference. The Applicant has not persuasively argued. Chatwin is not used to teach a means for providing interference. Chatwin teaches polyester used in a decorative article, providing a metallized plastic surface. Chatwin is also used to teach print mediums and tape adhered to a decorative article and a roll form. All the cited references provide the same materials Applicant uses and same technical field, thereby providing motivation to combine the art. Therefore, that indicia and threads are readable during a detection process is provided.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 746-8329

for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tamra L. Dicus
Examiner
Art Unit 1774

October 23, 2003

CYNTHIA H. KELLY
SUPERVISOR/EXAMINER
ART UNIT 1700

Cynthia H. Kelly